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CURRENT SERIAL RECORDS

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
COLORADO and NEW MEXICO

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE
and
COLORADO AGRICULTURAL EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State, and private organizations.

AS OF
MAY 1, 1965

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Soil Conservation Service, 511 N.W. Broadway - Room 507, Portland, Oregon 97209.

PUBLISHED BY SOIL CONSERVATION SERVICE

<u>REPORTS</u>	<u>ISSUED</u>	<u>LOCATION</u>	<u>COOPERATING WITH</u>
RIVER BASINS			
WESTERN UNITED STATES	MONTHLY (FEB.-MAY)	PORTLAND, OREGON	ALL COOPERATORS
BASIC DATA SUMMARY	OCTOBER 1	PORTLAND, OREGON	ALL COOPERATORS
STATES			
ALASKA	MONTHLY (MAR.-MAY)	PALMER, ALASKA	ALASKA S.C.D.
ARIZONA	SEMI-MONTHLY (JAN. 15 - APR. 1)	PHOENIX, ARIZONA	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
COLORADO AND NEW MEXICO	MONTHLY (FEB.-MAY)	FORT COLLINS, COLORADO	COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IDAHO	MONTHLY (JAN.-JUNE)	BOISE, IDAHO	IDAHO STATE RECLAMATION ENGINEER
MONTANA	MONTHLY (JAN.-JUNE)	BOZEMAN, MONTANA	MONT. AGR. EXP. STATION
NEVADA	MONTHLY (JAN.-MAY)	RENO, NEVADA	NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
OREGON	MONTHLY (JAN.-JUNE)	PORTLAND, OREGON	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH	MONTHLY (JAN.-JUNE)	SALT LAKE CITY, UTAH	UTAH STATE ENGINEER
WASHINGTON	MONTHLY (FEB.-JUNE)	SPOKANE, WASHINGTON	WN. STATE DEPT. OF CONSERVATION
WYOMING	MONTHLY (FEB.-JUNE)	CASPER, WYOMING	WYOMING STATE ENGINEER

PUBLISHED BY OTHER AGENCIES

<u>REPORTS</u>	<u>ISSUED</u>	<u>AGENCY</u>
BRITISH COLUMBIA	MONTHLY (FEB.-JUNE)	WATER RESOURCES SERVICE, DEPT. OF LANDS, FOREST AND WATER RESOURCES, PARLIAMENT BLDG., VICTORIA, B.C., CANADA
CALIFORNIA	MONTHLY (FEB.-MAY)	CALIF. DEPT. OF WATER RESOURCES, P.O. Box 388, SACRAMENTO, CALIF.

FEDERAL-STATE COOPERATIVE
SNOW SURVEYS AND WATER SUPPLY FORECASTS

for

COLORADO RIVER, PLATTE RIVER
ARKANSAS RIVER AND RIO GRANDE
DRAINAGE BASINS

Issued

May 1, 1965

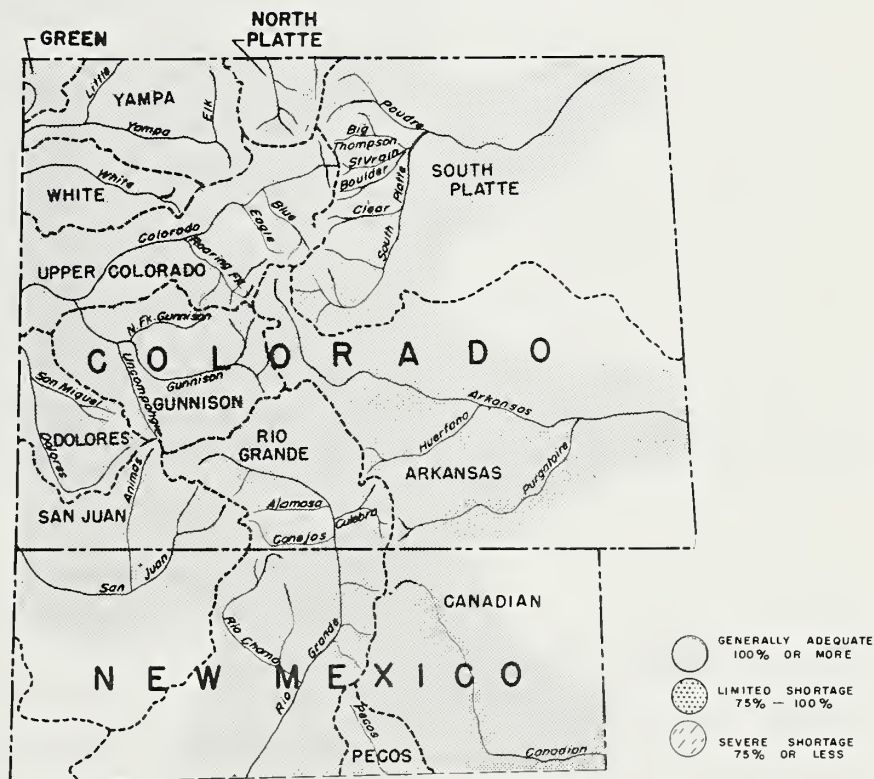
Report Prepared By
Jack N. Washichek, Snow Survey Supervisor
and

Don W. McAndrew, Assistant Snow Survey Supervisor
Fort Collins, Colorado

United States Department of Agriculture
Soil Conservation Service
and
Colorado Agricultural Experiment Station
Fort Collins, Colorado

State Engineer of Colorado
Denver, Colorado
and
State Engineer of New Mexico
Santa Fe, New Mexico

WATER SUPPLY OUTLOOK



THE MAP ON THIS PAGE INDICATES THE MOST PROBABLE WATER SUPPLY AS OF THE DATE OF THIS REPORT. ESTIMATES ASSUME AVERAGE CONDITIONS OF SNOW FALL, PRECIPITATION AND OTHER FACTORS FROM THIS DATE TO THE END OF THE FORECAST PERIOD. AS THE SEASON PROGRESSES ACCURACY OF ESTIMATES IMPROVE. IN ADDITION TO EXPECTED STREAM-FLOW, RESERVOIR STORAGE, SOIL MOISTURE IN IRRIGATED AREAS, AND OTHER FACTORS ARE CONSIDERED IN ESTIMATING WATER SUPPLY. ESTIMATES APPLY TO IRRIGATED AREAS ALONG THE MAIN STREAMS AND MAY NOT INDICATE CONDITIONS ON SMALL TRIBUTARIES.

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

as of
May 1, 1965



COLORADO— Water supplies should be more than adequate this summer in all areas of Colorado. The snow pack in many areas is approaching the maximum of record for May 1st. Forecasts range from 120% of normal in Northern Colorado to 180% in Southern Colorado. Mountain soils are generally wetter than normal, but valley soils are dry, especially on the Eastern Plains. Reservoirs are beginning to fill, but are still far below normal. With the anticipated high runoff some storage may be possible this year. Good precipitation during the summer as well as ideal runoff conditions could make this one of the best runoff years on record.



NEW MEXICO -- All snow fed streams in New Mexico will flow better than normal this summer. There should be adequate water for all water users. The flow won't be sufficient to eliminate the deficiency of storage, but may help to fill some of the state's larger reservoirs.

The forecasts on the main stem of the Rio Grande and the San Juan are extremely high.

Soils in the mountainous areas of the state are wet from melting snow, but valley soils are dry especially in Southern New Mexico.

The Canadian and Pecos should have good snow melt runoff.

Good summer precipitation is needed to insure forecasted supplies.

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WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I -

SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II -

ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca County, Southeastern Baca County, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III -

RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Mosca Hooper, Mt. Blanca, Sanches, and Culebra Soil Conservation Districts

WATERSHED IV -

RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Lower Cebolla, Abiquiu-Vallecitos, Eastern Taos, Lindrieth, Coyote-Canones, Espanola Valley, Pojoaque, Jemez, Santa Fe-Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V -

DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, and Glade Park Soil Conservation Districts.

WATERSHED VI -

GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII -

COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, Plateau Valley, South Side, and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII -

YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, Upper White River, Lower White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX -

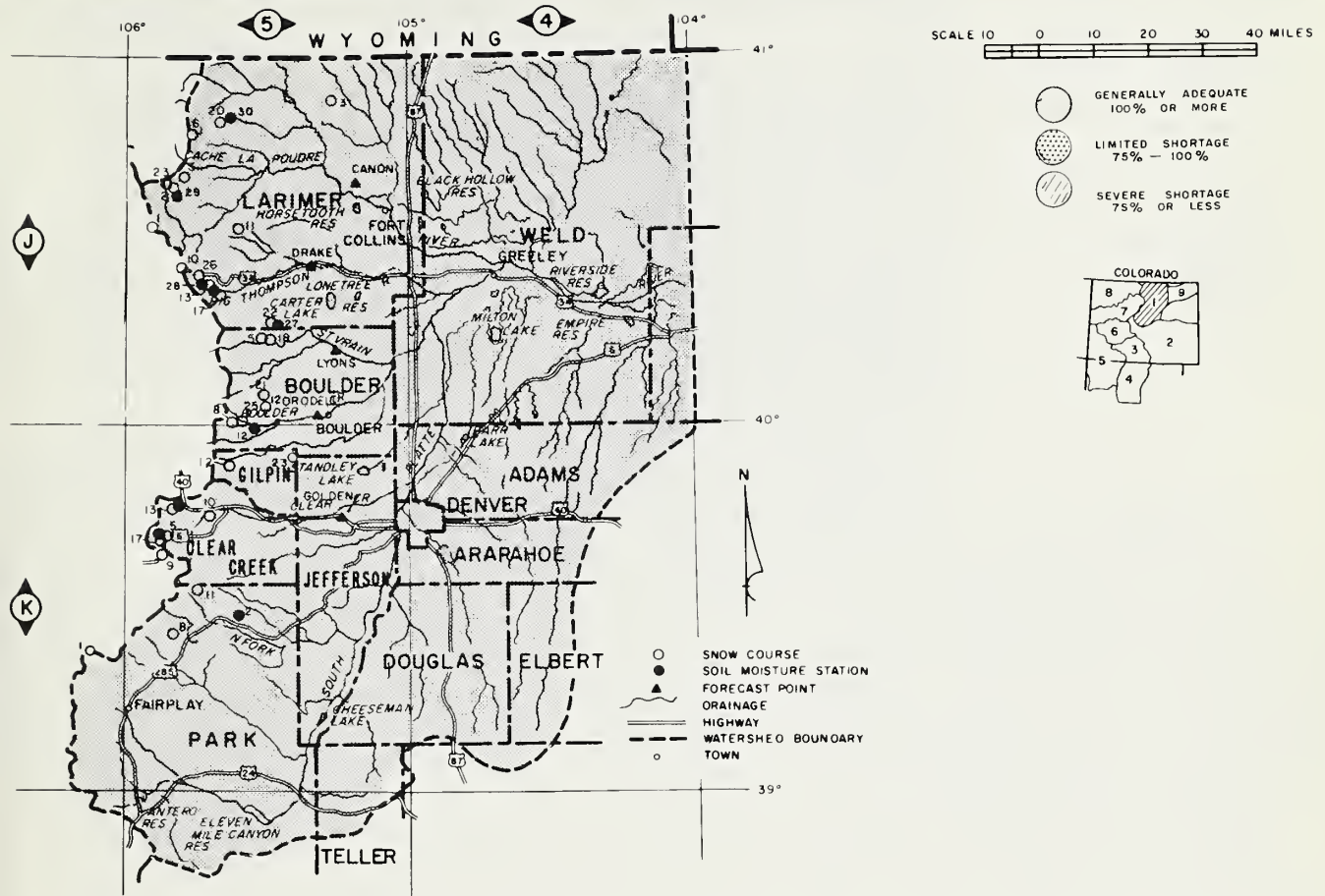
LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton Peetz, Padroni, Morgan Rock Creek and Yuma Soil Conservation Districts.

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of
May 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL -- Irrigation requirements in the South Platte system should be adequate this summer. Good water conservation practices will have to prevail to insure good water and increase reservoir storage throughout the basin.

SNOW -- The snow pack over the entire South Platte Basin is 132% of normal for May 1. High elevation snow cover is very good. The lower elevation snow pack has started to melt, but in most areas it is still substantially above the 1948-62 average. This situation should result in good streamflow throughout the irrigation season.

RESERVOIR STORAGE -- Current storage figures show the South Platte reservoirs contain somewhat less than normal storage for May first. This water will be an excellent supplement for summer runoff.

SOIL MOISTURE -- Mountain soils are becoming wet and in some cases are already saturated. In most areas the mountains are wetter than last year and are normal for this date.

FORECASTS -- Forecasts range from a low of 115% of normal on the Big Thompson to a high of 145% on the St. Vrain.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist,
Colorado

E. A. Nicholson, Area Conservationist,
Littleton, Colorado

SNOW

SNOW		CURRENT INFORMATION			PAST RECORD	
SNOW COURSE	NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE 1949-51
<u>South Platte River and Tributaries</u>						
Baltimore	5K23	5/1	20	5.6	7.0	- -
Berthoud Falls	5K13	5/1	50	20.6	13.6	13.8*
Big South	5J3	5/1	1	0.3	0.2	0.8
Boulder Falls	5J25	4/29	55	19.3	11.9	13.2*
Cameron Pass	5J1	4/29	79	34.3	32.2	28.1
Chambers Lake	5J2	5/1	21	9.6	7.0	5.5
Copeland Lake	5J18	4/29	15	4.0	1.8	2.3*
Deadman Hill	5J6	4/26	57	19.0	17.1	18.1
Deer Ridge	5J17	4/29	18	4.6	1.0	3.5*
Empire	5K10	5/1	35	11.9	7.5	7.1*
Geneva Park	5K11	4/28	19	6.6	0.0	1.9*
Grizzly Peak (B)	5K9	4/29	68	28.0	19.5	21.1
Hidden Valley	5J13	4/29	48	15.1	9.5	13.6
Hoosier Pass	6K1	4/30	58	19.8	10.0	12.9
Hour Glass Lake	5J11	4/29	35	9.2	6.1	7.5
Jefferson Creek	5K8	4/29	36	12.1	6.6	8.0*
Lake Irene (B)	5J10	4/28	72	29.2	20.4	24.7
Long's Peak	5J22	5/2	50	18.2	7.8	13.4*
Lost Lake	5J23	5/1	32	13.2	7.5	10.2*
Loveland Lift No. 1	5K24	4/29	88	34.2	26.0	- -
Loveland Pass	5K5	4/29	51	21.0	16.8	16.4
Pine Creek	5J31	4/30	1	0.2	0.2	- -
Red Feather	5J10	4/30	12	4.1	6.3	4.9*
Two Mile	5J26	4/29	65	21.6	14.1	17.8*
University Camp	5J8	4/29	72	27.2	15.2	24.9
Ward	5J21	4/27	41	10.7	5.6	6.0*
Wild Basin	5J5	4/29	60	17.9	9.8	14.8

STREAMFLOW FORECAST

(1,000 AC. FT.)

May THROUGH SEPTEMBER

STREAM AND STATION	FORECAST May - SEPT.	THIS YEAR AVERAGE	1949-51 AVERAGE
Big Thompson at Drake (2)	120	115	105
Boulder at Orodell	69	135	51
Cache La Poudre at Canon Mouth (1)	303	127	239
Clear Creek at Golden	181	140	129
Saint Vrain at Lyons	110	145	76

NOTE: * - 1949-51 (ADJUSTED AVERAGES)

NS - NO SURVEY

(A) - AIR OBSERVED

(B) - ON ADJACENT DRAINAGE

This Report Prepared by
Jack N. Washichek and Don W. McAndrew
Soil Conservation Service
Colorado State University
Fort Collins, Colorado

(1) Observed flow minus diversions from
Michigan, Colorado and Laramie rivers, plus
diversions for irrigation and municipal use
above station.

(2) Observed flow plus by-pass to power plants.

RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	MEASURED FIRST OF MONTH		
		THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1949-51
Antero	33.0	0	0	13.4
Barr Lake	32.2	16.0	20.6	24.7
Black Hollow	8.0	2.4	4.0	3.3
Boyd Lake	58.0	26.6	36.5	20.8
Cache La Poudre	9.5	8.3	9.9	7.7
Carter Lake	108.9	95.4	100.4	79.0
Chambers Lake	8.8	3.9	4.4	2.8
Cheeseman	79.0	29.0	22.1	54.3
Cobb Lake	34.3	5.6	9.4	9.2
Eleven Mile	81.9	30.0	61.1	74.6
Fossil Creek	11.6	6.0	9.6	7.1
Gross	43.1	16.2	18.2	- -
Halligan	6.4	5.3	6.2	3.9
Horsetooth	143.5	102.5	109.9	85.6
Lake Loveland	13.6	8.4	10.6	7.4
Lone Tree	9.2	3.0	8.0	7.9
Mariano	5.4	5.3	5.2	3.2
Marshall	10.3	1.7	3.0	4.4
Marston	18.9	15.7	14.9	15.2
Milton	24.4	1.8	12.8	12.5
Standly	18.5	9.4	10.9	12.6
Terry Lake	8.2	4.1	6.2	5.2
Union	12.7	6.6	2.5	8.2
Windsor	18.6	3.2	13.5	11.4

SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Alpine Camp	4/27	6.9	5.0	3.5	4.3
Beaver Dam	4/27	7.3	4.4	3.4	4.7
Clear Creek	4/29	9.5	5.7	4.8	5.9
Feather	4/28	10.1	10.1	4.6	8.1
Guard Station	5/2	6.9	3.2	3.7	4.7
Hoop Creek	4/29	4.9	2.8	- -	2.9
Hoosier Pass	4/29	7.8	4.4	4.4	5.9
Kenosha Pass	4/29	4.4	3.5	2.7	3.7
Laramie Road	5/1	12.4	8.6	7.1	9.0
Two Mile	3/18	9.1	4.6	4.4	5.6

ALL PROFILES 4 FEET DEEP

RETURN IF NOT DELIVERED

UNITED STATES

DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

Snow Survey

Colorado State University

Fort Collins, Colorado

OFFICIAL BUSINESS

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U.S. DEPARTMENT OF AGRICULTURE

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

WATERSHED II

as of
May 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL -- Water users along the Arkansas River should enjoy one of the best irrigation seasons they have ever had. The Purgatoire and Cucharas Drainages should also have adequate water this summer.

SNOW -- Snow pack is still excellent over the entire basin. Currently the snow pack is 155% of the 1948-62 average. Low elevation snow cover is still very good. This situation indicates very good early water this season. High elevation snow pack in the headwaters area is also very good and should sustain the flow of the Arkansas River well into late summer.

RESERVOIR STORAGE -- Carry-over storage is practically non-existent along the Arkansas River this season. Currently there is 15,300 Acre Feet in storage in the major reservoirs.

SOIL MOISTURE -- Soils in the high mountains have started to wet up. In many cases they are completely saturated. In all areas throughout the basin the mountains are wetter than last year and wetter than normal for May first.

STREAMFLOW -- The Arkansas River at Salida is forecast to flow 490,000 Acre Feet from May through September this year. The Purgatoire and Cucharas Rivers are forecast to flow about 125% of average this season.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist,
Colorado

Will D. McCorkle, Area Conservationist.

SNOW

SNOW COURSE	NO.	CURRENT INFORMATION			PAST RECORD	
		DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE (1946-52)
Arkansas River						
Bigelow Divide	5L3	4/29	31	5.5	6.3	--
Blue Lakes	5M6	4/28	14	2.0	0.0	--
Bourbon	5M5	4/29	23	5.3	0.0	2.9*
Cooper Hill	6K23	4/28	54	15.3	7.7	--
Cucharas Pass	5M7	4/28	20	4.0	5.2	--
East Fork	6K17	4/28	33	13.6	9.0	13.4
Four Mile Park	6K7	4/29	19	6.6	0.3	1.0
Fremont Pass	6K8	4/28	61	23.8	15.3	19.5
Garfield	6L8	4/26	65	22.9	13.2	--
LaVeta Pass	5M1	4/28	18	5.1	5.4	1.7
Monarch Pass	6L4	4/27	79	27.0	18.9	18.4
St. Elmo	6L5	4/28	58	22.0	9.0	11.8
Tennessee Pass	6K2	4/29	40	13.5	10.0	8.5
Tomichi	6L7	4/27	47	17.7	15.0	--
Twin Lakes Tunnel	6K3	4/29	41	15.5	8.5	9.1
Westcliffe	5L2	4/29	18	3.4	0.0	1.1

NOTE: * - 1946-52 (ADJUSTED AVERAGES)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE (1946-60)
Adobe Creek	61.6	0	0	13.0
Clear Creek	11.4	7.6	7.8	4.7
Cucharas	40.0	0	0.9	5.3
Great Plains	150.0	0	0	44.4
Horse Creek	26.9	0	0	5.6
John Martin	366.6	0	0	64.6
Meredith	41.9	0	0	10.4
Model	15.0	0.1	2.8	2.2
Sugar Loaf	17.4	5.2	4.1	6.8
Twin Lakes	57.9	2.4	17.3	17.2

MEASURED FIRST OF MONTH

SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Garfield	4/27	6.7	5.8	2.9	4.3
King	4/27	3.3	2.8	1.5	2.1
LaVeta Pass	4/3	11.9	11.9	11.9	11.8
Leadville	4/28	7.8	5.5	4.5	4.8
Twin Lakes Tunnel	4/29	4.5	4.1	1.2	3.1

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

May THROUGH SEPTEMBER

STREAM AND STATION	FORECAST May - SEPT.	THIS YEAR AVERAGE	AVERAGE (1946-52)
Arkansas at Pueblo (1)	438	145	302
Arkansas at Salida (1)	490	151	324
Cucharas near LaVeta	16	123	13
Purgatoire at Trinidad	54	126	43

This Report Prepared by
 Jack N. Washichek and Don W. McAndrew
 Soil Conservation Service
 Colorado State University
 Fort Collins, Colorado

- (1) Observed flow plus change in storage in Clear Creek, Twin Lakes, and Sugar Loaf Reservoirs minus diversions through Bask-Ivanhoe and Twin Lake Tunnels and Ewing, Fremont Pass, Wurtz and Columbine Ditches.

RETURN IF NOT DELIVERED

UNITED STATES

DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

Snow Survey
 Colorado State University
 Fort Collins, Colorado

OFFICIAL BUSINESS

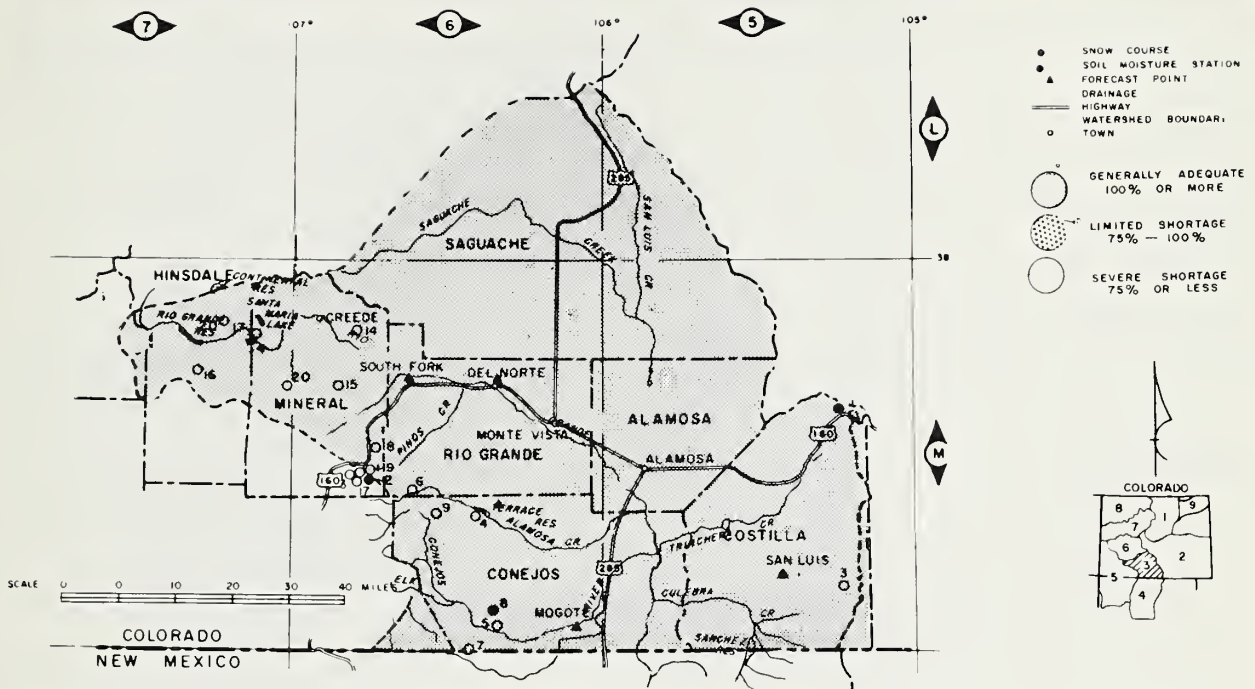
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WATERSHED III

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO
as of

May 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL -- Water requirements should be easily satisfied in this area this summer. Snow fields are higher than any year since 1952.

SNOW -- The snow pack in this area is extremely high. Currently the headwaters of the Rio Grande has 180% of normal snow cover. Some of the low elevation snow courses indicate 3 or 4 times as much snow as usual for this time of year. The Conejos Drainage has the highest snow pack in the state with 236% of normal. The Alamosa Drainage measures 196% of normal.

RESERVOIR STORAGE -- Some water is already being retained in mountain reservoirs and generally they contain more water than last year at this time. Most of these reservoirs should fill this year. Carry-over storage has been extremely low for the last few years.

SOIL MOISTURE -- Soil moisture in the higher elevations is similar to last year and much better than normal. This should help to hold up the summer runoff. Valley soils are reported in fair condition.

FORECASTS -- Forecasts range from 136% of normal on the Conejos to 162% on the Alamosa. All rivers should flow much above normal.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist,
Colorado

Benny Martin, Area Conservationist,
Durango, Colorado

SNOW

SNOW		CURRENT INFORMATION			PAST RECORD	
SNOW COURSE	NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE 1949-52
<u>Rio Grande in Colorado</u>						
Cochetopa Pass	6L6	4/28	22	5.9	5.8	2.7*
Hiway	6M19	4/27	104	44.3	18.8	27.8*
Lake Humphreys	6M15	4/29	10	3.4	0.0	0.2*
Pass Creek	6M18	4/27	42	16.1	4.1	3.3*
Pool Table	6M14	4/29	22	9.0	2.1	1.9*
Porcupine	6M20	4/26	35	15.0	7.0	6.8*
Red Mountain Pass (B)	7M15	4/28	84	40.2	29.0	31.4*
Santa Maria	7M17	4/29	5	1.7	0.0	0.5
Upper Rio Grande	7M16	4/29	17	6.1	0.0	2.3
Wolf Creek Pass	6M1	4/27	98	43.4	21.8	24.7
Wolf Creek Summit (B)	6M17	4/27	120	50.6	20.4	30.2
<u>Alamosa River</u>						
Silver Lakes	6M4	4/28	16	5.1	0.6	0.5
Summitville	6M6	5/2	85	36.0	13.4	20.5
<u>Conejos River</u>						
Cumbres Pass	6M7	4/28	66	30.5	14.4	12.5
Platoro	6M9	4/27	62	24.8	13.2	10.9*
River Springs	6M5	NS			0	0.7
<u>Sangre De Cristo Range</u>						
Blue Lakes (B)	6M6	4/28	14	2.0	0	--
Cucharas Pass (B)	5M7	4/28	20	4.0	5.2	--
Culebra	6M3	4/30	24	8.9	3.1	5.2
LaVeta Pass	5M1	4/28	18	5.1	5.4	1.7

NOTE: * - 1949-52 (ADJUSTED AVERAGES)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

This Report Prepared by
 Jack N. Washichek and Don W. McAndrew
 Soil Conservation Service
 Colorado State University
 Fort Collins, Colorado

RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1949-62
Continental	26.7	3.2	1.5	7.7
Platoro	60.0		3.0	
Rio Grande	45.8	15.2	5.3	14.8
Sanchez	103.2	6.5	6.5	12.3
Santa Maria	45.0	4.6	3.5	7.8
Terrace	17.7	7.8	2.3	4.8

MEASURED FIRST OF MONTH

SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Alberta Park	4/30	8.2	5.6	5.6	5.6
Bristol View	4/29	6.1	4.2	4.2	4.4
LaVeta Pass	4/30	11.9	11.9	11.9	11.8
Mogote	4/27	10.7	10.5	8.2	9.0

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

STREAM AND STATION	FORECAST May - SEPTEMBER		THIS YEAR AVERAGE	AVERAGE 1949-62
	May	SEPT.		
Alamosa above Terrace	99	162	61	
Conejos near Mogote	239	136	175	
Culebra at San Luis (2)	30	150	20	
Rio Grande at 30 Mile Bridge (1)	170	142	120	
Rio Grande ne Del Norte	656	147	446	
South Fork at South Fork	166	153	108	

- (1) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoir
- (2) Observed flow plus changes in storage in Sanchez Reservoir

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RIO GRANDE WATERSHED IN NEW MEXICO as of

May 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL -- Water supplies should be adequate for irrigation requirements, but will not alleviate the deficiency in reservoir storage. All the streams that are dependent or to somewhat dependent on snow melt for runoff should flow better than normal this year.

SNOW -- Snow is almost gone in New Mexico. This is a normal situation. Only during the higher snow pack years does snow persist past May first. Only the very high elevations have any snow remaining. In Colorado, headwaters of the Rio Grande, snow is still piled high.

RESERVOIR STORAGE -- Storage in the major reservoirs of the state is extremely low and a good runoff year is needed.

SOIL MOISTURE -- Mountains soils are wet in most areas from melting snow, however, valley soils are dry and some of the early runoff will be needed to wet these soils.

FORECASTS -- Forecasts are high on all streams in New Mexico, but the highest is the main stem of the Rio Grande where March-July runoff is expected to be nearly twice normal.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

Courtney A. Tidwell, State Conservationist,
New Mexico

R. M. Bell, Area Conservationist,
Santa Fe, New Mexico

SNOW

SNOW COURSE	NO.	CURRENT INFORMATION			PAST RECORD	
		DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE 1946-52
<u>Rio Grande (Colorado)</u>						
Culebra	6M3	4/30	24	8.9	3.1	5.2
Cumbres Pass	6M7	4/28	66	30.5	14.4	12.5
LaVeta Pass	5M1	4/28	18	5.1	5.4	1.7
Platoro	6M9	4/27	62	24.8	13.2	10.9*
River Springs	6M5	----	----	----	0.0	0.7
Santa Maria	7M17	4/29	5	1.7	0.0	0.5
Silver Lakes	6M4	4/28	16	5.1	0.6	0.5
Summitville	6M6	5/2	85	36.0	13.4	20.5
Upper Rio Grande	7M16	4/29	17	6.1	0.0	2.3
Wolf Creek Pass	6M1	4/27	98	43.4	21.8	24.7
Big Tesuque (New Mexico)	5P3	4/29	1	.04	--	--
Chamita	6N3	4/28	2	0.7	--	--
Red River	5N1	4/29	5	2.5	--	--
Taos Canyon	5N2	4/29	20	6.5	--	--

NOTE: * - 1946-52 (ADJUSTED AVERAGES)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

This Report Prepared by
 Jack N. Washichek and Don W. McAndrew
 Soil Conservation Service
 Colorado State University
 Fort Collins, Colorado

Rio Grande at San Marcial is Forecast at 151% of the Elephant Butte Irrigation District's normal.

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RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1946-62
Alamogordo	122.1	2.0	23.0	63.8
Caballo	344.0	12.9	21.5	102.1
Conchas	280.3		81.0	229.5
Elephant Butte	2206.8	145.6	240.0	354.0
El Vado	194.5	29.0	3.4	55.1
McMillan-Avalon	37.0	6.0	16.0	10.6
Red Bluff (Tex)	307.0	20.4	31.1	59.1

MEASURED FIRST OF MONTH

SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
<u>Colorado</u>					
Alberta Park	4/30	8.2	5.6	5.6	5.6
Bristol View	4/29	6.1	4.2	4.2	4.4
Mogote	4/27	10.7	10.5	8.2	9.0
<u>New Mexico</u>					
Aqua Piedra	3/30	7.2	2.7	2.4	4.7
Bateman	3/30	6.7	NS	0.7	2.7
Big Tesuque	3/30	3.7	1.7	1.7	2.4
Chamita	3/29	8.0	5.5	2.7	5.4
Fenton Hill	3/30	6.5	3.7	3.8	--
Red Summit	3/30	4.8	1.6	1.5	2.1
Rio En Medio	3/30	3.5	1.9	1.1	1.5
Taos Canyon	3/29	3.3	2.2	1.8	2.9

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

May THROUGH SEPTEMBER

STREAM AND STATION	FORECAST May - SEPT.	THIS YEAR AVERAGE	AVERAGE 1946-52
Costilla at Costilla (11)	27	123	22
Pecos at Pecos	75	174	42
Rio Chama nr La Puente	210	139	151
Rio Grande at Otowi (10)*	910	207	439
Rio Grande at San Marcial (10)*	790	246	321
Rio Hondo nr Valdez	22	138	16
Red River at Questa	25	119	21

(10) Observed flow plus changes in storage in El Vado Reservoirs.

* Rio Grande at Otowi and Rio Grande at San Marcial Forecast and Average - July inclusive.

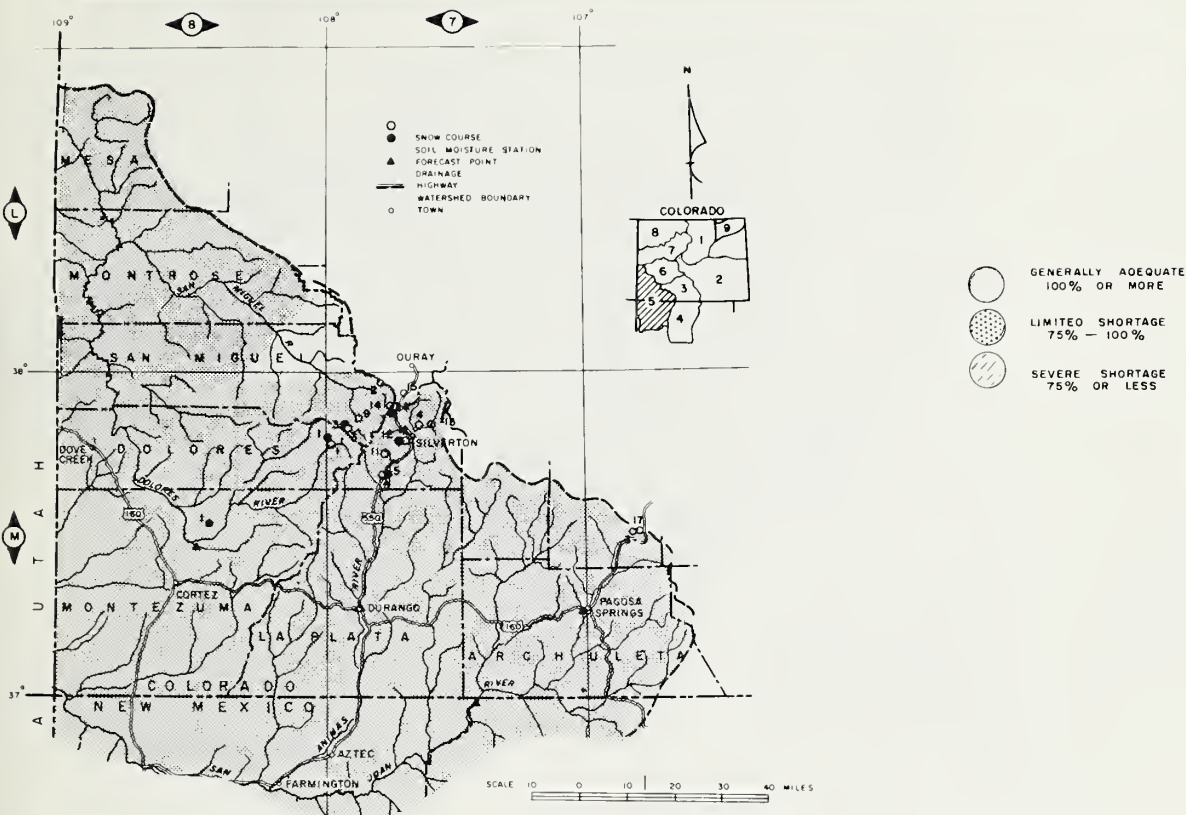
** Red River at Questa Forecast and Average May - July inclusive.

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WATER SUPPLY OUTLOOK WATERSHED V
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL - DOLORES - ANIMAS - SAN JUAN
WATERSHEDS IN COLORADO AND NEW MEXICO

as of
May 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL -- Snow melt runoff should be the best in a number of years in this area. Water supplies should be more than adequate for all users.

SNOW -- The snow pack in this area is the highest in a number of years. Current snow course measurements indicate snow pack on the San Juan Drainage is 170% of normal while snow on the Animas is a staggering 200% of normal. The Dolores Drainage is somewhat less with only 136% of the 15 year normal. Low snow is also high for this time of year.

RESERVOIR STORAGE -- Reservoirs are starting to fill and are now approaching normal for this time of year. Some carry-over storage should be possible this year.

SOIL MOISTURE -- Not too much snow melt water will be needed to replace soil moisture. Current soil moisture readings indicate soils are in better condition than normal and much better than last year. Valley soils are reported in good condition.

FORECASTS -- The May - September flows should be excellent this year. Forecasts range from 126% to 180% of the 15 year normal. Forecasts are based on normal precipitation and temperatures for the remainder of the year.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist,
Colorado
Benny Martin, Area Conservationist,
Durango, Colorado
Darl Beach, Area Conservationist,
Grand Junction, Colorado

C. A. Tidwell, State Conservationist
New Mexico
Walter B. Rumsey, Area Conservationist
Albuquerque, New Mexico

SNOW

SNOW COURSE ¹	NO.	CURRENT INFORMATION			PAST RECORD	
		DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	AVERAGE (1948-52)
San Juan River						
Chama Divide (B)	6N2	4/28	0	0	0.0	--
Chamita (B)	6N3	4/28	2	0.7	0.0	--
Upper San Juan	6M3	4/27	102	49.2	25.1	30.2
Wolf Creek Pass (B)	6M1	4/27	98	43.4	21.8	24.7
Wolf Creek Summit	6M17	4/27	120	50.6	20.4	30.2
Animas River						
Cascade	7M5	4/29	27	10.7	6.3	3.0
Howardville	7M13	4/28	43	16.0	7.0	7.4*
Ironton Park (B)	7M6	4/29	23	8.4	13.8	7.1
Mineral Creek	7M14	4/28	49	18.2	12.3	12.1*
Molas Lake	7M12	4/28	46	17.9	8.9	7.8*
Red Mountain Pass	6M19	4/28	84	40.2	29.0	31.4*
Silverton Sub-Station	7M4	4/28	2	0.5	0.0	0.1
Spud Mountain	7M11	4/28	89	36.6	18.9	23.8*
Dolores River						
Lizzard Head	7M3	4/29	50	20.1	15.7	13.7
Rico	7M1	4/29	0	0.0	0.0	1.0
Telluride	7M2	4/28	0	0.0	1.1	0.7
Trout Lake	7M9	4/28	40	14.2	12.2	9.9*

NOTE: * - 1948-52 (ADJUSTED AVERAGES)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

STREAMFLOW FORECAST (1,000 AC. FT.)

STREAM AND STATION	FORECAST	THIS YEAR	AVERAGE
	May - SEPT.	%	1948-52
Animas at Durango	574	126	405
Dolores at Dolores	343	157	218
Florida nr Hermosa	75	144	52
La Plata at Hesperus	31	141	22
Los Pinos at Bayfield	303	149	203
Piedra Creek nr Piedra	263	175	150
San Juan at Rosa NM	850	181	468

* OBSERVED FLOW PLUS CHANGES IN STORAGE IN VALLECITO RESERVOIR

RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-52
Groundhog	21.7	7.5	7.0	8.6
Navajo	1036.0	385.0	--	--
Vallecito	126.3	59.0	37.3	50.9

MEASURED FIRST OF MONTH

SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Cascade	4/29	9.1	9.1	7.0	6.8
Dolores	4/29	19.6	19.6	2.9	11.4
Lizzard Head	4/29	11.8	10.7	4.4	8.5
Mineral Creek	4/29	5.7	5.4	2.7	4.1
Molas Lake	4/29	9.4	9.0	3.0	5.8
Rico	4/29	13.8	13.5	3.7	9.0

ALL PROFILES 4 FEET DEEP

This Report Prepared by
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 Soil Conservation Service
 Colorado State University
 Fort Collins, Colorado

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SOIL CONSERVATION SERVICE

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GUNNISON RIVER WATERSHED IN COLORADO

as of

May 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL -- Water supplies in the Gunnison Drainage should be more than adequate this summer. This could be the best runoff year since 1957.

SNOW -- Snow is piled high in many areas of the Gunnison Drainage. Perhaps the biggest accumulation is in the vicinity of Crested Butte, however, the area around Taylor Reservoir is also high. The Gunnison as a whole has 152% of normal snow. The Uncompahgre Drainage shows current snow pack at 132% of the 1948-62 average.

RESERVOIR STORAGE -- Taylor Reservoir is down from last month, but with the high runoff that is expected it should easily fill.

SOIL MOISTURE -- Mountain soils are starting to fill with snow melt water. Currently they are wetter than normal for this time of year.

FORECASTS -- Forecasts range from 133% of normal on Surface Creek to 147% of normal on the Gunnison. Forecasts are made assuming normal temperatures and precipitation for the remainder of the year.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist,
Colorado

Dearl Beach, Area Conservationist,
Grand Junction, Colorado

SNOW

SNOW COURSE		NO.	CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
						LAST YEAR	AVERAGE 1946-52
<u>Gunnison River</u>							
Alexander Lakes		7K3	4/29	76	27.8	18.2	23.0
Black Mesa		7L5	4/27	64	22.6	20.0	- -
Blue Mesa		7L2	4/29	11	3.2	3.8	2.3*
Butte		6L11	4/27	58	22.3	- -	- -
Cochetopa Pass		6L6	4/23	22	5.9	5.8	2.7*
Crested Butte		6L1	4/26	42	24.6	12.7	7.5
Keystone		7L3	4/27	75	30.8	19.6	- -
Lake City		7M8	4/22	31	8.7	5.2	3.5
Long Gulch		7L4	NS			4.0	- -
Mesa Lakes (B)		7K4	4/30	58	21.7	17.5	15.9
Monarch Pass (B)		6L4	4/27	79	27.0	18.9	18.4
McClure Pass		7K8	4/27	48	19.7	12.0	10.1*
Mineral Creek (B)		7M14	4/28	49	18.2	12.3	12.1*
North Lost Trail (B)		7K1	4/27	48	18.9		
Park Cone		6L2	4/26	42	15.5	7.8	8.7
Park Reservoir		7K6	4/30	76	30.7	20.8	25.5
Porphyry Creek		6L3	4/27	67	24.3	21.5	17.7
Tomichi		6L7	4/27	47	17.7	15.0	- -
Trickle Divide (B)		7K5	4/30	81	33.5	25.0	28.8
<u>Uncompahgre River</u>							
Ironton Park		7M6	4/29	23	8.4	13.8	7.1
Lizzard Head		7M3	4/29	50	20.1	15.7	13.7
Lone Cone		7M7	4/27	44	15.6	- -	- -
Red Mountain Pass (B)		7M15	4/28	84	40.2	29.0	31.4
Telluride		7M2	4/28	0	0.0	1.1	0.7
Trout Lake		7M9	4/28	40	14.2	12.1	9.9*

NOTE: • - 1948-52 (ADJUSTED AVERAGES)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1946-62
Taylor	106.2	41.7	50.5	60.3

MEASURED FIRST OF MONTH

SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Grand Mesa	4/30	12.5	12.2	7.1	- -
King	4/27	3.3	2.8	1.5	2.1
Mineral Creek	4/29	5.7	5.4	2.7	4.1
Placita	4/29	9.3	7.5	5.4	8.1

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

STREAM AND STATION	May THROUGH SEPTEMBER		
	FORECAST May - SEPT.	THIS YEAR AVERAGE	AVERAGE 1946-52
Gunnison nr Grand Jct.	1650	147	1120
Surface Creek nr Cedaridge	20	133	15
Uncompahgre at Colona	181	145	124

This Report Prepared by
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 Soil Conservation Service
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 Fort Collins, Colorado

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SOIL CONSERVATION SERVICE

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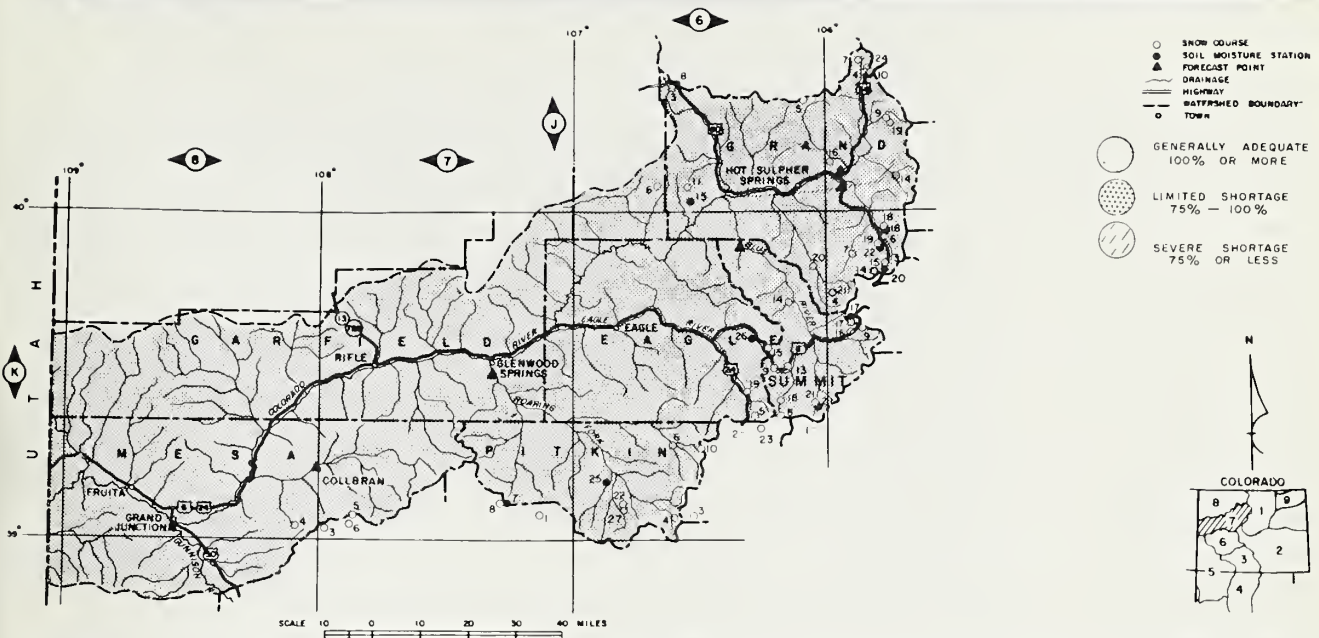
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE COLORADO RIVER WATERSHED IN COLORADO as of

May 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL -- The Colorado River Drainage has one of the best snow packs on record. The snow pack increased over the entire basin over the April 1 percentage. Water users are assured of above normal supplies during the coming season.

SNOW -- The main stem of the Colorado River has 135% of average snow cover. Snow pack on the Roaring Fork Drainage is currently 155% of normal. Plateau Creek has 122% snow cover. Streamflow should be good early and carry up well into the late season this year.

RESERVOIR STORAGE -- There is 105,000 Acre Feet of storage in reservoirs around the headwaters area of the Colorado River. Vega Reservoir in the Grand Mesa area contains 8,000 Acre Feet.

SOIL MOISTURE -- Mountain soils are wetter than last year and near normal for May 1st.

FORECASTS -- Streamflow forecasts range from 125% of average on Plateau Creek to 161% of average on the Roaring Fork River. The main stem of the Colorado River is expected to flow 1,955,000 Acre Feet between May 1 and September 30 this year.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist,
Colorado

Dearl Beach, Area Conservationist
Grand Junction, Colorado
J. L. Hall, Area Conservationist,
Glenwood Springs, Colorado

SNOW

SNOW COURSE	NO.	CURRENT INFORMATION			PAST RECORD	
		DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	AVERAGE (1946-52)
<u>Colorado River</u>						
Arrow	5K6	4/29	44	15.1	11.1	9.1
Berthoud Pass	5K3	4/29	50	19.2	14.5	15.7
Berthoud Summit	5K14	5/1	64	26.2	18.9	21.6
Blue River	6K21	4/29	36	12.7	6.8	8.0*
Cooper Hill	6K23	4/28	54	15.3	7.7	- -
Fiddlers Gulch	6K5	4/29	55	18.6	13.0	17.0
Fremont Pass	6K8	4/28	61	23.8	15.3	19.5
Frisco	6N3	4/30	23	8.0	5.0	5.6*
Glen Mar Ranch	6K20	4/27	17	7.1	7.8	4.8
Gore Pass	6J11	4/28	37	13.2	9.2	7.9*
Granby	5J16	4/28	23	8.8	5.1	3.3*
Grand Lake	5J19	4/27	23	8.1	5.3	3.7*
Grizzly Peak	5K9	4/29	68	28.0	19.5	21.1
Hoosier Pass	6K1	4/30	58	19.8	10.0	12.9
Jones Pass	5K21	4/29	51	19.5	14.9	16.9*
Lake Irene	5J10	4/28	72	29.2	20.4	24.7
Lapland	5K9	4/29	30	11.2	7.3	9.3
Lulu	5J7	5/1	57	22.1	17.9	19.8
Lynx Pass	6J6	4/28	30	10.8	10.6	7.8
McKinzie Gulch	6K28	4/26	10	3.3	0.7	- -
Middle Fork Campground	5K4	4/27	30	10.9	8.5	6.4
Milner	5J24	4/27	48	17.8	11.7	12.1*
Monarch Lake	5J14	4/25	29	10.7	5.3	6.4
North Inlet to Grand Lake	5J9	4/26	31	10.5	5.7	6.7
Pando	6K19	4/28	29	12.5	10.7	8.3
Phantom Valley	5J4	4/27	31	12.1	7.5	7.0
Ranch Creek	5K18	4/29	39	12.2	8.1	9.6*
Shrine Pass	6K9	4/30	59	24.7	17.8	20.2
Snake River	5K16	4/29	18	7.0	3.8	5.1*
Summit Ranch	6K14	4/27	33	11.5	5.0	6.1*
Tennessee Pass	6K2	4/29	40	13.5	10.0	8.5
Vail Pass	6K15	4/30	56	23.9	14.1	16.3*
Vasquez Creek	5K19	4/29	45	15.8	12.5	14.0
Willow Creek Pass	6J5	4/28	37	12.5	8.3	12.0
<u>Roaring Fork River</u>						
Aspen	7J22	4/27	76	23.5	12.8	- -
Independence Pass Tunnel	6K4	4/29	56	22.9	18.3	17.6
Ivanhoe	6K10	4/30	66	19.8		19.2
Lift	7K27	4/27	80	28.0	18.2	17.8*
McClure Pass	7K8	4/27	48	19.7	12.0	10.1*
Nast	6K6	4/28	19	6.4	3.2	1.7
North Lost Trail	7K1	4/27	48	18.9	13.9	8.0
<u>Plateau Creek</u>						
Alexander Lake	7K3	4/29	76	27.8	18.2	23.0
Mesa Lakes	7K4	4/30	58	21.7	17.5	15.9
Park Reservoir	7K6	4/30	76	30.7	20.8	25.5
Trickle Divide	7K5	4/30	81	33.5	25.0	28.8

NOTE: * - 1946-52 (ADJUSTED AVERAGES)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE (1946-62)
Granby	465.5	46.2	128.0	185.0
Green Mountain	146.9	46.8	56.6	46.9
Vega	32.9	8.0	8.4	- -
Williams Fork	96.8	18.9	20.4	- -

SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Berthoud Pass	4/29	3.9	2.6	2.8	2.8
Blue River	4/29	4.2	2.8	2.6	2.7
Gore	4/28	4.9	3.3	3.3	4.4
Grand Mesa	4/30	12.5	12.2	7.1	- -
Muddy Pass	4/27	11.1	6.7	5.7	8.5
Placita	4/29	9.3	7.5	5.4	8.1
Ranch Creek	4/27	8.7	5.8	5.8	6.5
Vail	4/30	12.3	9.0	8.7	11.0
Vasquez Siphon	4/28	11.0	7.9	7.3	9.2

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)
MAY THROUGH SEPTEMBER

STREAM AND STATION	FORECAST May - SEPT.	THIS YEAR AVERAGE	AVERAGE (1946-52)
Blue River abv Green Mt.	339	131	258
Colo. River abv Glenwood Springs (5)	1955	138	1411
Colo. River nr Granby (4)	279	126	221
Plateau Cr. nr Collbran	55	125	44
Roaring Fork at Glenwood Springs (6)	1152	161	714
Williams Fork nr Parshall (3)	109	153	71
Willow abv Willow Creek	64	145	44
Colorado River nr Cameo	3198	159	2011

- (3) Plus diversions through Jones Pass Tunnel.
 (4) Observed flow plus diversions by Adams tunnel and Grand River ditch plus change in storage in Granby Reservoir.
 (5) Observed flow plus the changes as indicated in (4) plus Moffat Ditch.
 (6) Observed flow plus diversion through Twin Lakes tunnel

This Report Prepared by
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 Fort Collins, Colorado

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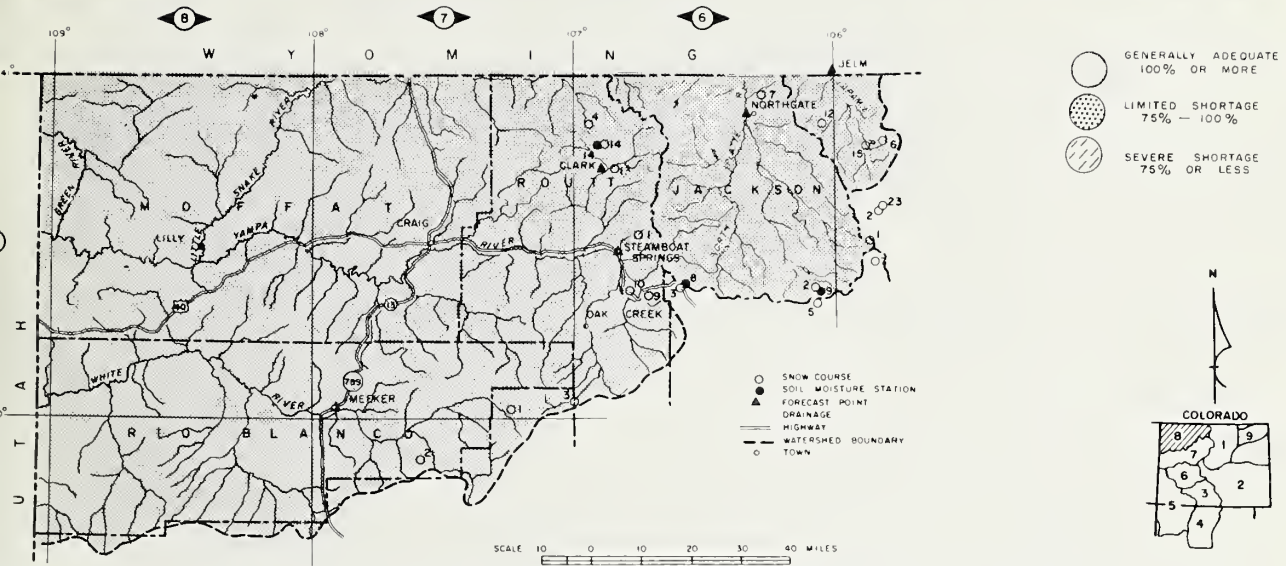
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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE
RIVERS WATERSHEDS IN COLORADO

as of
May 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL -- Water supplies will be adequate for all irrigation requirements on the North Platte, Yampa and White River Drainages this summer. This area does not have the high snow pack typical of most of the other areas of the state, but the irrigation requirements are limited as well.

SNOW -- Snow pack remained similar to the first of April. Currently snow pack is 121% of normal on the North Platte, and 127% on the Yampa. For the first time this year snow was measured at Buffalo Pass. Here the snow is extremely deep, but may be a normal situation. Snow pack on the White River is slightly better than the Platte or White.

SOIL MOISTURE -- Soils contain just about normal amounts of moisture for this time of year, but slightly less than last year. Valley soils are reported in good condition and should help the runoff picture to some extent.

FORECASTS -- Forecasts range from 139% of normal on Yampa and White to 154% on the Little Snake. Forecasts are based on normal precipitation and temperatures for the remainder of the year.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist,
Colorado

J. L. Hall, Area Conservationist,
Glenwood Springs, Colorado

SNOW

SNOW		CURRENT INFORMATION			PAST RECORD	
SNOW COURSE	NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AVERAGE 1946-52
<u>North Platte River</u>						
Cameron Pass	5J1	4/29	79	34.3	32.2	28.1
Columbine Lodge	6J3	4/27	64	28.6	23.5	22.9
Deadman Hill (B)	5J6	4/26	57	19.0	17.1	18.1
McIntyre (B)	5J15	4/24	38	13.1	13.2	10.2*
Northgate	6J7	4/30	15	4.7	5.4	3.0*
Park View	6J2	4/28	28	8.7	5.5	6.8
Roach	6J12	4/25	60	24.0	17.8	21.0
Willow Creek Pass (B)	6J5	4/28	37	12.5	8.3	12.0
<u>Yampa River</u>						
Bear River	7J3	4/27	33	10.8	9.7	8.3*
Clark	6J13	4/28	14	6.8	7.1	- -
Columbine Lodge (B)	6J3	4/27	64	28.6	23.5	22.9
Dry Lake	6J1	4/26	53	22.6	19.3	17.2
Elk River	6J4	4/28	47	20.3	18.9	13.4
Hahn's Peak	6J14	4/28	26	11.3	13.8	- -
Lynx Pass	6J6	4/28	30	10.8	10.6	7.8
Rabbit Ears	6J9	4/27	71	29.6	27.6	27.9
Yampa View	6J10	4/27	31	13.1	12.6	9.7*
<u>White River</u>						
Burro Mountain	7K2	4/26	48	19.5	19.9	15.8
Rio Blanco	7J1	4/28	33	17.0	16.4	10.5

NOTE: * - 1946-52 (ADJUSTED AVERAGES)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Hahn's Peak	4/28	19.0	11.4	12.4	- -
Laramie Road	5/1	12.4	8.6	7.1	9.0
Muddy Pass	4/27	11.1	6.7	7.9	8.5
Two Mile	3/18	9.1	4.6	4.4	5.6
Willow Pass	4/28	9.5	6.0	7.1	6.9

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

STREAM AND STATION	MAY THROUGH SEPTEMBER		
	FORECAST MAY - SEPT.	THIS YEAR % AVERAGE	AVERAGE 1946-52
Elk at Clark	273	145	188
Laramie at Jelm	123	117	105
Little Snake at Lilly	395	154	256
White at Meeker	417	139	299
Yampa at Maybell	1161	148	784
Yampa at Steamboat Spr.	344	139	248
North Platte at Northgate	302	143	210

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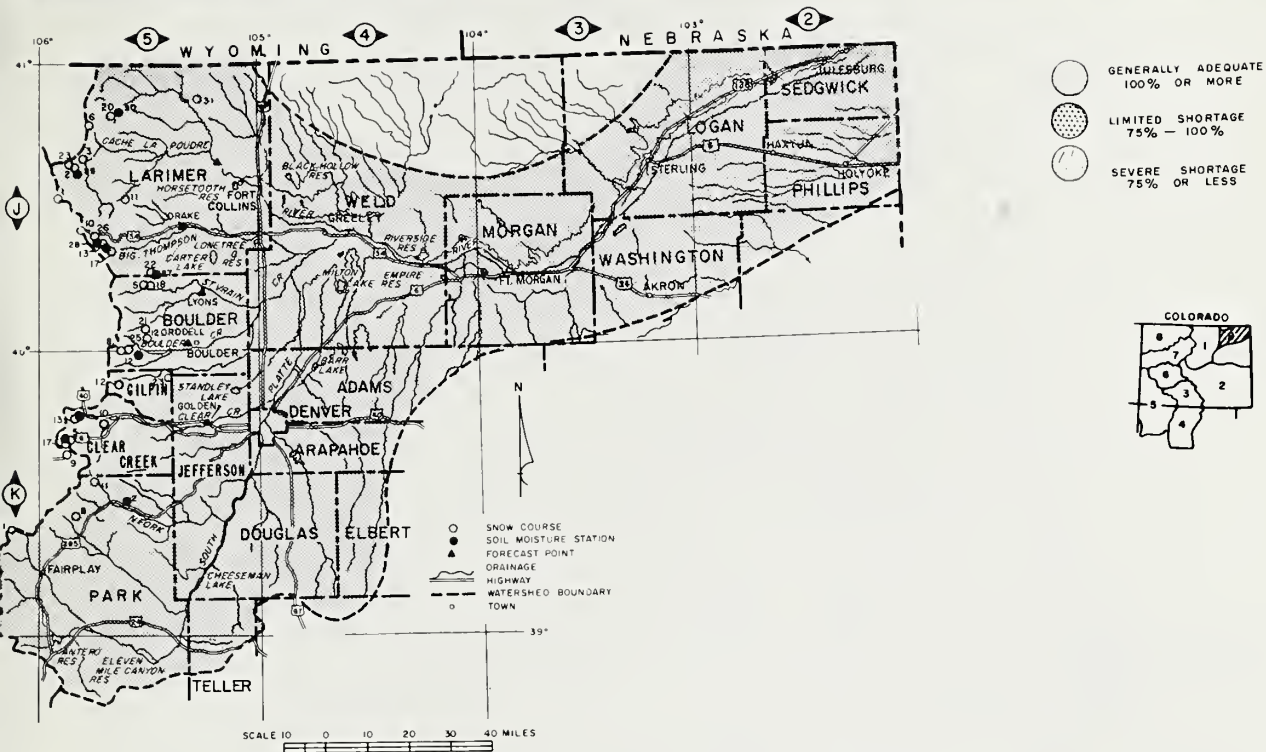
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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of
May 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL -- Irrigation requirements in the South Platte system should be adequate this summer. Good water conservation practices will have to prevail to insure good water and increase reservoir storage throughout the basin.

SNOW -- The snow pack over the entire South Platte Basin is 132% of normal for May first. High elevation snow cover is very good. The lower elevation snow pack has started to melt, but in most areas it is still substantially above the 1948-62 average. This situation should result in good streamflow throughout the irrigation season.

RESERVOIR STORAGE -- Water in storage along the Lower South Platte is currently 78% of the 1948-62 average.

SOIL MOISTURE -- Mountain soils are becoming wet and in some cases are already saturated. In most areas the mountains are wetter than last year and are normal for this date. Valley soils in the Lower South Platte are reported to be dry.

FORECASTS -- Forecasts range from a low of 115% of normal on the Big Thompson to a high of 145% on the St. Vrain.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist,
Colorado

Wallace L. Bruce, Area Conservationist
Sterling, Colorado

SNOW

SNOW		CURRENT INFORMATION			PAST RECORD	
SNOW COURSE	NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
					LAST YEAR	AV. 1946-52
<u>South Platte River and Tributaries</u>						
Baltimore	5K23	5/1	20	5.6	7.0	- -
Berthoud Falls	5K13	5/1	50	20.6	13.6	13.8*
Big South	5J3	5/1	1	0.3	0.2	0.8
Boulder Falls	5J25	4/29	55	19.3	11.9	13.2*
Cameron Pass	5J1	4/29	79	34.3	32.2	28.1
Chambers Lake	5J2	5/1	21	9.6	7.0	5.5
Copeland Lake	5J18	4/29	15	4.0	1.8	2.3*
Deadman Hill	5J6	4/26	57	19.0	17.1	18.1
Deer Ridge	5J17	4/29	18	4.6	1.0	3.5*
Empire	5K10	5/1	35	11.9	7.5	7.1*
Geneva Park	5K11	4/28	19	6.6	0.0	1.9*
Grizzly Peak (B)	5K9	4/29	68	28.0	9.5	13.6
Hidden Valley	5J13	4/29	48	15.1	9.5	13.6
Hoosier Pass	6K1	4/30	58	19.8	10.0	12.9
Hour Glass Lake	5J11	4/29	35	9.2	6.1	7.5
Jefferson Creek	5K8	4/29	36	12.1	6.6	8.0*
Lake Irene (B)	5J10	4/28	72	29.2	20.4	24.7
Long's Peak	5J22	5/2	50	18.2	7.8	13.4*
Lost Lake	5J23	5/1	32	13.2	7.5	10.2*
Loveland Lift No. 1	5K24	4/29	88	34.2	26.0	---
Loveland Pass	5K5	4/29	51	21.0	16.8	16.4
Pine Creek	5J31	4/30	1	0.2	0.2	- -
Red Feather	5J10	4/30	12	4.1	6.3	4.9*
Two Mile	5J26	4/29	65	21.6	14.1	17.8*
University Camp	5J8	4/29	72	27.2	15.2	24.9
Ward	5J21	4/27	41	10.7	5.6	6.0*
Wild Basin	5J5	4/29	60	17.9	9.8	14.8

NOTE: * - 1946-52 (ADJUSTED AVERAGES)
 NS - NO SURVEY
 (A) - AIR OBSERVED
 (B) - ON ADJACENT DRAINAGE

STREAMFLOW FORECAST (1,000 AC. FT.)

May THROUGH SEPTEMBER

STREAM AND STATION	FORECAST May - SEPT.	THIS YEAR % AVERAGE	AVERAGE 1946-52
Big Thompson at Drake (2)	120	115	105
Boulder at Orodell	69	135	51
Cache La Poudre at Canon Mouth (1)	303	127	239
Clear Creek at Golden	181	140	129
Saint Vrain at Lyons	110	145	76

(1) Observed flow minus diversions from Michigan, Colorado and Laramie rivers, plus diversions for irrigation and municipal use above station.

(2) Observed flow plus by-pass to power plants.

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RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1946-52
Carter	108.9	95.4	100.4	79.0
Cheeseman	79.0	29.0	22.1	54.3
Eleven Mile	81.9	30.0	61.1	74.6
Empire	37.7	27.3	33.0	29.6
Horsetooth	143.5	102.5	109.9	85.6
Jackson	35.4	32.4	34.4	34.2
Julesburg	28.2	22.1	23.3	22.0
Point of Rocks	70.0	47.0	53.4	61.6
Prewitt	32.8	0	12.4	21.7
Riverside	57.5	47.7	60.9	51.0

MEASURED FIRST OF MONTH

SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Alpine Camp	4/27	6.9	5.0	3.5	4.3
Beaver Dam	4/27	7.3	4.4	3.4	4.7
Clear Creek	4/29	9.5	5.7	4.8	5.9
Feather	4/28	10.1	10.1	4.6	8.1
Guard Station	5/2	6.9	3.2	3.7	4.7
Hoop Creek	4/29	4.9	2.8	- -	2.9
Hoosier Pass	4/29	7.8	4.4	4.4	5.9
Kenosha Pass	4/29	4.4	3.5	2.7	3.7
Laramie Road	5/1	12.4	8.6	7.1	9.0
Two Mile	3/18	9.1	4.6	4.4	5.6

ALL PROFILES 4 FEET DEEP

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LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

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Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado Experiment Station
Rocky Mountain Forest and Range Experiment Station

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WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

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San Luis Valley Irrigation District
Santa Maria Reservoir Company
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Twin Lakes Reservoir and Canal Company
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